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A Look at NASA

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NASA Weekly Update

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March 9: Repairs Underway: NASA employees spent the week positioning platforms around the shuttle to allow for inspections and repairs to hail-damaged areas. After preliminary evaluation of the hail damage

In highbay 1 inside the Vehicle Assembly Building, technicians begin to carefully sand away the red dye that has been applied to the external tank to help expose cracks or compression dents.

to Atlantis, it appears NASA will be able to repair rather than replace the External Tank. However, evaluations are ongoing and there are still several outstanding tests to be performed before a final decision is reached. Inspections are finished for the solid rocket boosters and nearly complete for the orbiter, with 20 of 28 hail-damaged areas, all on the left side of the vehicle, already repaired. A new target launch date has not been determined, but teams will focus on preparing Atlantis for liftoff in late April. For more information on the Web, visit: www.nasa.gov/shuttle.

March 8: NASA to Announce Winner of Space Station Student Naming Contest: NASA's newest module for the International Space Station is about to be given a new name. The Kennedy Space Center will host a media event on Thursday, March 15, at noon EDT to unveil the Node 2 module's new name. The name was chosen from an academic competition involving thousands of students in kindergarten through high school. Video of the event will air on NASA Television's Video File segment. For NASA TV downlink, streaming video and scheduling information, visit: http://www.nasa.gov/ntv. For more information on Node 2, visit: http://www.nasa.gov/station.

March 7: NASA Completes Key Review of Orion Spacecraft: NASA has established a requirements baseline for the Orion crew exploration vehicle, bringing America's next human spacecraft a step closer to construction. The Orion Project completed its system requirements review in cooperation with its prime contractor, Lockheed Martin, March 1. The review marked the first major milestone in the Orion engineering process and provided the foundation for design, development, construction and safe operation of the spacecraft that will carry explorers to Earth orbit, to the moon, and eventually to Mars. The detailed requirements established in this review will serve as the basis for ongoing design analysis work and systems testing. For more information about NASA's Constellation Program, visit: http://www.nasa.gov/constellation.

March 7: Statement Regarding the Status of Lisa Nowak: U.S. Navy Capt. Lisa Nowak's detail as a NASA astronaut has been terminated, effective March 8, by mutual agreement between NASA and the U.S. Navy. Nowak, an active duty naval officer, began her detail with NASA following selection as a member of the astronaut class of 1996. She flew one mission, STS-121 in 2006. NASA requested an end to the detail because the agency lacks the administrative means to deal appropriately with the criminal charges pending against Nowak. Because Nowak is a naval officer on assignment to NASA, rather than a NASA civil servant, she is not subject to administrative action by NASA. Nowak will receive her next assignment from the U.S. Navy. NASA's decision to terminate Nowak's detail does not reflect any position by NASA on the criminal charges pending in Florida.

March 7: NASA and USGS Produce most Detailed Satellite Views of Antarctica: Researchers from NASA and the U.S. Geological Survey (USGS), Golden, Colo., have woven together more than a

thousand images from the Landsat 7 satellite to create the most detailed, high-resolution map ever produced of Antarctica. The Landsat Image Mosaic of Antarctica (LIMA) offers views of the coldest continent on Earth in 10 times greater detail than previously possible. To view LIMA images on the Antarctic Portal, visit: http://lima.usgs.gov. For more information about Landsat, visit: http://landsat.usgs.gov.

March 7: NASA to Explore Future Collaborations with State of Hawaii: NASA officials announced Wednesday they have agreed to explore future collaborations with the state of Hawaii in commercial space initiatives and programs supporting research, education and workforce development. Under the terms of a memorandum of understanding signed today in Hawaii, NASA Ames Research Center will explore opportunities for future collaborations with the state of Hawaii in support of the Vision for Space Exploration, NASA's plan to return humans to the moon and later travel to Mars.

March 7: NASA Ames to Host International Space University Summer Session: NASA announced on Wednesday that the International Space University Summer Session Program in 2009 will be held at the Ames Research Center, Moffett Field, Calif. Approximately 120 students from all over the world will participate in the summer session. An international cadre of distinguished professors will teach the classes. The summer session runs from mid-June to August 2009. For more information about the International Space University, visit: http://www.isunet.edu.

March 6: NASA Scientist Inducted into National Inventors Hall of Fame: Emmett Chappelle, retired research scientist from NASA's Goddard Space Flight Center, Greenbelt, Md., has been named one of 16 inductees for 2007 into the National Inventors Hall of Fame. The honorees will be inducted during ceremonies May 4-5, in Akron, Ohio. The National Inventors Hall of Fame was founded in 1973. The recognition honors innovators who have changed society and improved the way we live. Chappelle was chosen for his work with Lyophilized Reaction Mixtures. His work revealed that a specific combination of chemicals causes all living organisms to omit light.

Weekly Status Reports

International Space Station (ISS)

The Expedition 14 crew members this week prepared for upcoming additions to the station and performed experiments related to human adaptation to space. Commander Michael Lopez-Alegria and Flight Engineer Suni Williams completed the last of the internal assembly tasks for the startup later this year of the new Oxygen Generation System in the Destiny laboratory. The astronauts installed sound-deadening equipment and an electrical cable and reconnected a wastewater hose for the hardware delivered last summer on space shuttle mission STS-121. The Oxygen Generation System will be required when the station crew size expands to six people. Slated for activation during Expedition 15, it will function initially as a backup to the Russian Elektron system, which supplies oxygen for the station's crew.

Lopez-Alegria and Williams also performed scientific experiments, conducting another session with the Anomalous Long-Term Effects in Astronauts' Central Nervous System (ALTEA) to measure exposure to cosmic radiation. For more about the crew's activities and station sighting opportunities, visit: http://www.nasa.gov/station.

Upcoming Events

- **April 7:** Launch of the Expedition 15 crew. The crew includes Commander Fyodor Yurchikhin and Flight Engineer Oleg Kotov. Sunita Williams will finish her remaining time of her six-month tour of duty on the station as a member of Expedition 15 crew.
- **April 18:** Landing of the Expedition 14 crew at Kazakhstan's Baikonur Cosmodrome. The crew includes Commander Michael Lopez-Alegria, Flight Engineer Mikhail Tyurin, and Flight Engineer Sunita Williams.
- **Targeted for Late April:** Launch of Space Shuttle Atlantis from Kennedy Space Center for mission STS-117 to the International Space Station.

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